

M. KATAYAMA: A New Macrouroid Fish from the Japan Sea

Color light purplish brown, darker above than below; side of head with silvery reflections; opercle with dark blotch; circumoral region to anus and gill membrane blackish; branchial and peritoneal cavities lined with blackish. First dorsal black; pectoral and ventral somewhat dark.

The foregoing description and figure are based upon a male specimen, measuring 185 mm in total length to broken tip of tail.

It is similar to *C. hubbsi* MATSUBARA²⁾ in having 6 rows of scales arranged in a series from origin of second dorsal to lateral line and no scales on underside of head, but distinguished from it in having the following characters: interdorsal space long, about equal to base of first dorsal fin; scales with numerous small spinules arranged in quincunx order; anus located just before anal fin; and no marking whatever.

A New Cottoid Fish from the Inland Sea of Japan

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Two specimens representing a new species, *Astrocottus matsubarae*, were obtained at Kakogawa, Hyôgo-ken in March, 1937.

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***Astrocottus matsubarae* sp. nov.**

New Japanese name: Seto-kazika

D. IX, 12; A. 12; P. 17; V. I, 3; scales in lateral line 30.

Head 2.94 in body length measured to base of middle caudal ray: depth 3.84; width of head 3.57. Eye 4.25 in head; snout 4.05; maxillary 2.65; interorbital space 8.50; suborbital width 6.07; depth of caudal peduncle 5.16; postorbital part of head 1.77; longest dorsal spine (fourth one) 2.36; longest dorsal ray (fourth one) 2.24; longest anal ray (fifth one) 2.78; ventral 1.93; caudal 1.41.

2) MATSUBARA, K. 1936. On two new species of fishes found in Japan. *Annot. Zool. Japan.*, 15 (3).

Head and anterior part of body depressed, posterior part slightly compressed. Head rather large, more than one-third the body length; snout moderately steep. Mouth moderate; jaws about equal; maxillary extending to middle of pupil. Interorbital space concave and narrow, about equal to posterior width of maxillary. Nasal spine simple, small and sharp. Villiform teeth on jaws and vomer, and a few small teeth on palatines. Preopercle with three short spines: upper one slightly curved upward, rarely forked; middle one broad and triangular; lower one simple and obtuse.

Gill membranes broadly united, free from isthmus. Branchiostegals 6. No slit behind last gill.

Origin of first dorsal directly over posterior end of subopercle; base of fin 1.36 in head. Second dorsal separated from first by an interspace about equal to depth of caudal peduncle; base of fin 1.29 in head. Base

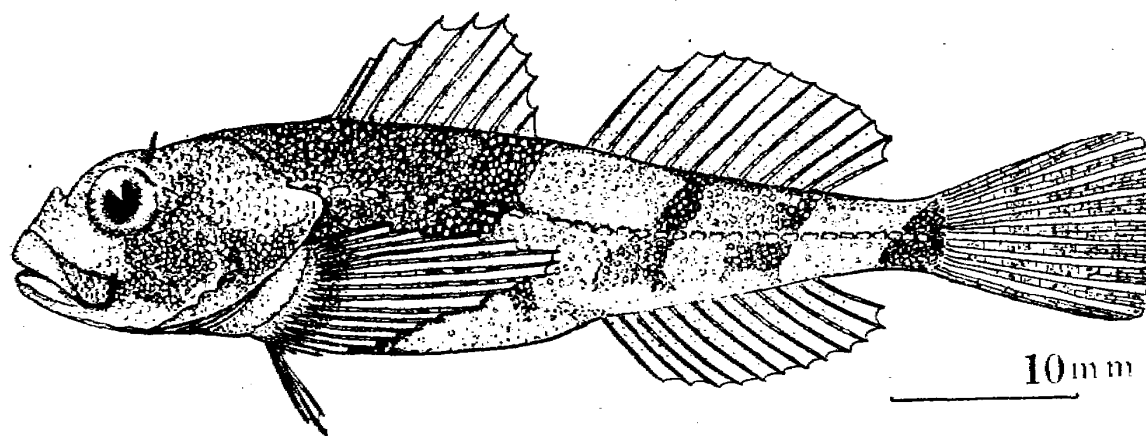


Fig. 1. *Astrocottus matsubarae* sp. nov.

of anal short, 1.31 in head. Pectoral not reaching to anal. Caudal truncate.

Head and body almost completely scaled, but lips, chin, gill membranes, and maxilla naked; scales on ventral portion of body much reduced in size and number. Scales of lateral line in the form of short tubes bearing strongly ctenoid ridges dorsally. General body scales with imbedded plates, from which arise semicircular ctenoid ridges.

A slender cirrus on upper posterior margin of each orbit.

Color in formalin pale reddish brown and mottled above, with four dark brown cross bars: one under posterior part of first dorsal, one under middle of second dorsal, one under posterior part of second dorsal, and one across caudal peduncle at base of rays; a slight indication of additional bar under anterior part of first dorsal; a dark bar extends downward and backward from eye; a dark brown bar on base of pectoral; dorsal, anal, and ventral colorless.

The above description and figure are based upon a specimen 61.5 mm in total length.

The dimensions of cotype run as follows: Total length 58.5 mm; D. X, 11; A. 13; P. 17; V. I, 3; scales in lateral line 30. Head 2.84 in body length; depth 4.00; width of head 3.58. Eye 4.12 in head; snout 4.12; maxillary 2.79; interorbital space 9.15; suborbital width 6.60; depth of caudal peduncle 5.50; postorbital part of head 1.89; longest dorsal spine (fourth one) 2.42; longest dorsal ray (fourth one) 2.41; longest anal ray (fifth one) 3.00; ventral 2.06; caudal 1.57; base of first dorsal fin 1.37; base of second dorsal fin 1.50; base of anal fin 1.27.

The present species is closely allied to *Astrocottus leprops* BOLIN, but can be distinguished from it by the following characters:

<i>A. leprops</i>	<i>A. matsubarae</i>
1. Dorsal rays 15	1.11 or 12
2. Anal rays 17	2.12 or 13
3. Pectoral rays 20	3.17
4. Lateral line scales 34	4.30
5. Head 3.3 in body length.	5.2.8-2.9
6. Eye 3.2 in head.	6.4.1-4.2
7. Interorbital space flat, about 2.0 in posterior width of maxillary.	7.concave, about equal to.....
8. Base of anal fin longer than head, 2.7 in body length.	8.shorter than head, 3.6-3.8.....
9. No teeth on palatines	9. A few small teeth.....